Amdt. dated <u>May 18, 2006</u>

Reply to Office Action of February 22, 2006

## Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

1. (Currently amended) A method for resource management of performed in a call control processor, the method comprising:

allocating resources in response to an origination call or a page response call of a terminal in a mobile communication system; and

sending a request again for allocation of available resources to the a resource management processor within a predetermined time period; and period, even

repeatedly requesting allocation of available resources by the call control processor until obtained, if a the resource management processor fails to allocate resources upon receiving request for resource allocation.

- 2. (Currently amended) The method according to claim 1, wherein the repeatedly requesting further comprising comprises:
- (a) sending a request for resource allocation at the call control processor to a resource management processor;
  - (b) if resource allocation is denied, transmitting resource a resource allocation failure

Amdt. dated May 18, 2006

Reply to Office Action of February 22, 2006

message at the resource management processor to the call control processor;

(c) if the call control processor receives resource the resource allocation failure

message, checking at the call control processor whether any other call has been released or

whether any other processor has returned to a normal state from an abnormal state within the

predetermined time; and

(d) if it is determined from process-(c) that any call has been released or that said

any other processor has returned to the normal state from the abnormal state within certain-the

predetermined time, sending a request for re-allocation of available resources at the call control

processor to the resource management processor processor, and

wherein, if the allocation of resources in response to the available resource re-

allocation request made by the call control processor in (d) is denied, said (b) through (d) are

conducted repeatedly.

3. (Canceled)

4. (Currently amended) The method according to claim 3 claim 2, wherein the

number of repetitions of process (b) through (d) is limited to a predetermined number.

5. (Currently amended) The method according to claim 1, wherein said pre-

3

Amdt. dated May 18, 2006

Reply to Office Action of February 22, 2006

determined time period is the time allocated for waiting from the terminal's receipt of theof a base station's response message regarding the call connection request made by the terminal until the requested call is connected.

- 6. (Original) The method according to claim 1, wherein the resource management processor is at least one of a service data unit (SDU) management processor managing service data units (SDUs), a network control processor managing network resources, and a base station processor managing channels.
- 7. (Currently amended) The method according to claim 2, wherein said other processor of said processes (c) or (d) comprises a processor state block indicating a state of the relevant processor.
- 8. (Original) The method for resource management of a call control processor according to claim 7, wherein said other processor is at least one of a service data unit (SDU) management processor managing service data units (SDUs), a network control processor managing network resources, and a base station processor managing channels.
  - 9. (Currently amended) The method according to claim 7, wherein in said process

Amdt. dated <u>May 18, 2006</u>

Reply to Office Action of February 22, 2006

(c) the call control processor checks whether any other processor has returned to the normal state from the abnormal state by checking the processor state blocks of the other processors.

10. (Currently amended) The method according to claim 2, wherein in said process (c) if any other processor returns to the normal state from the abnormal state:

said other processor notifies the call control processor of the return to the normal state; and

the call control processor checks whether said other processor has returned to the normal state from the abnormal state through the other processor's notification of the event occurrence.

- 11. (Currently amended) The method according to claim 2, wherein in said process (c) the call control processor checks a base station manager (BSM) that manages the base station controller of the mobile communication system, thereby checking whether any other processor has returned to the normal state from the abnormal state.
- 12. (Currently amended) The method according to claim 2, wherein in said process(c) if any other processor returns to the normal state from the abnormal state:

notifying the call control processor of the occurrence of the return to the normal

Amdt. dated <u>May 18, 2006</u>

Reply to Office Action of February 22, 2006

state by the base station manager; and

checking whether said other processor has returned to the normal state from the abnormal state through the base station manager's notification of the return to normal state.

- 13. (Original) The method of claim 1, wherein the terminal is a mobile hand station.
- 14. (Currently amended) A mobile communication system comprising:

  a call control processor configured to send a request for resource allocation to a resource management processor,

wherein the call control processor is configured to check whether any other call has been released or whether any other processor has returned to the normal state from the abnormal state withinwithin a predetermined time period, if the call control processor receives a resource allocation failure message from the resource management processor; processor, and

wherein the call control processor is configured to send a request for re-allocation of available resources to the resource management processor, if it is determined that any other call has been released or that any other processor has returned to the normal state from the abnormal statestate, and

Docket No. SI-0045

Serial No. 10/724,115

Amdt. dated May 18, 2006

Reply to Office Action of February 22, 2006

repeatedly request resource allocation by the call control processor until obtained, if the resource management processor fails to allocate resources upon receiving request for resource allocation.

- 15. (Original) The mobile communication system according to claim 14, wherein the call control processor is in a base station controller.
- 16. (Original) The mobile communication system according to claim 14, wherein the resource management processor is at least one of a service data unit (SDU) management processor managing service data units (SDUs), a network control processor managing network resources, and a base station processor managing channels.
- 17. (Original) The mobile communication system according to claim 14, wherein said other processor comprises a processor state block indicating the state of the relevant processor.
- 18. (Original) The mobile communication system according to claim 17, wherein said other processor is at least one of a service data unit (SDU) management processor managing service data units (SDU), a network control processor managing network resources, and a base station processor managing channels.

Serial No. **10/724,115** Amdt. dated May 18, 2006

Reply to Office Action of February 22, 2006

- 19. (Original) The mobile communication system according to claim 17, wherein the call control processor is configured to check whether any other processor has returned to the normal state from the abnormal state by checking the processor state blocks of the other processors.
- 20. (Original) The mobile communication system according to claim 14, wherein if any other processor returns to the normal state from the abnormal state:

said other processor is configured to notify the call control processor of occurrence of the return to normal state; and

the call control processor is configured to check whether said other processor has returned to the normal state from the abnormal state through the other processor's notification of the return to normal state.

21. (Original) The mobile communication system according to claim 15, wherein:
the mobile communication system further comprises a base station manager
configured to manage the base station controller, and

the call control processor is configured to check whether said other processor has returned to the normal state from the abnormal state by checking the base station manager.

22. (Original) The mobile communication system according to claim 14, wherein if any other processor returns to the normal state from the abnormal state:

the base station manager is configured to notify the call control processor of the occurrence of the return to normal state; and

the call control processor is configured to check whether said other processor has returned to the normal state from the abnormal state through the base station manager's notification of the return to the normal state.

23. (Original) The mobile communication system according to claim 14, wherein the mobile communication system comprises:

at least one mobile hand station;
at least one base station;
at least one base station controller; and

at least one mobile switching center (MSC).

24. (Currently amended) A method for resource management comprising:

receiving a request for resource allocation from a terminal;

requesting resource allocation;

monitoring resource availability during a predetermined connection time; and

Serial No. 10/724,115 Amdt. dated May 18, 2006 Reply to Office Action of February 22, 2006

notifying the terminal of resource allocation failure after the predetermined connection time, a resource is unavailable within the predetermined connection time; and

repeatedly requesting allocation of available resources by a call control processor until obtained, if failure to allocate resources upon receiving request for resource allocation occurs.

25. (Currently amended) The method of claim 24, wherein monitoring resource availability comprises:

transmitting a resource allocation failure message to a call the call control processor, if resource allocation fails; and

determining whether at least one resource becomes available during the predetermined connection time.

26. (Original) The method of claim 25, wherein monitoring resource availability further comprises

notifying the call control processor of resource availability, if the requested resource becomes available within the predetermined connection time;

repeating the request for resource allocation by the call control processor; and

Docket No. SI-0045

Serial No. 10/724,115 Amdt. dated May 18, 2006 Reply to Office Action of February 22, 2006

allocating the requested resource and connecting to the terminal.

27. (Original) The method of claim 24, wherein the resource allocation is provided by at least one of a service data unit (SDU) management processor managing service data units (SDUs), a network control processor managing network resources, and a base station processor managing channels.

28. (Original) The method of claim 24, further comprising:

allocating the requested resource, if the requested resource becomes available within the predetermined connection time; and

connecting the terminal, without sending a resource allocation failure message to the terminal even if an initial resource request resulted in a failure.

- 29. (Original) The method of claim 24, wherein the terminal is at least one of a mobile terminal, PDA, and mobile hand station.
- 30. (Original) The method of claim 25, wherein the call control processor is integrated into a base station.